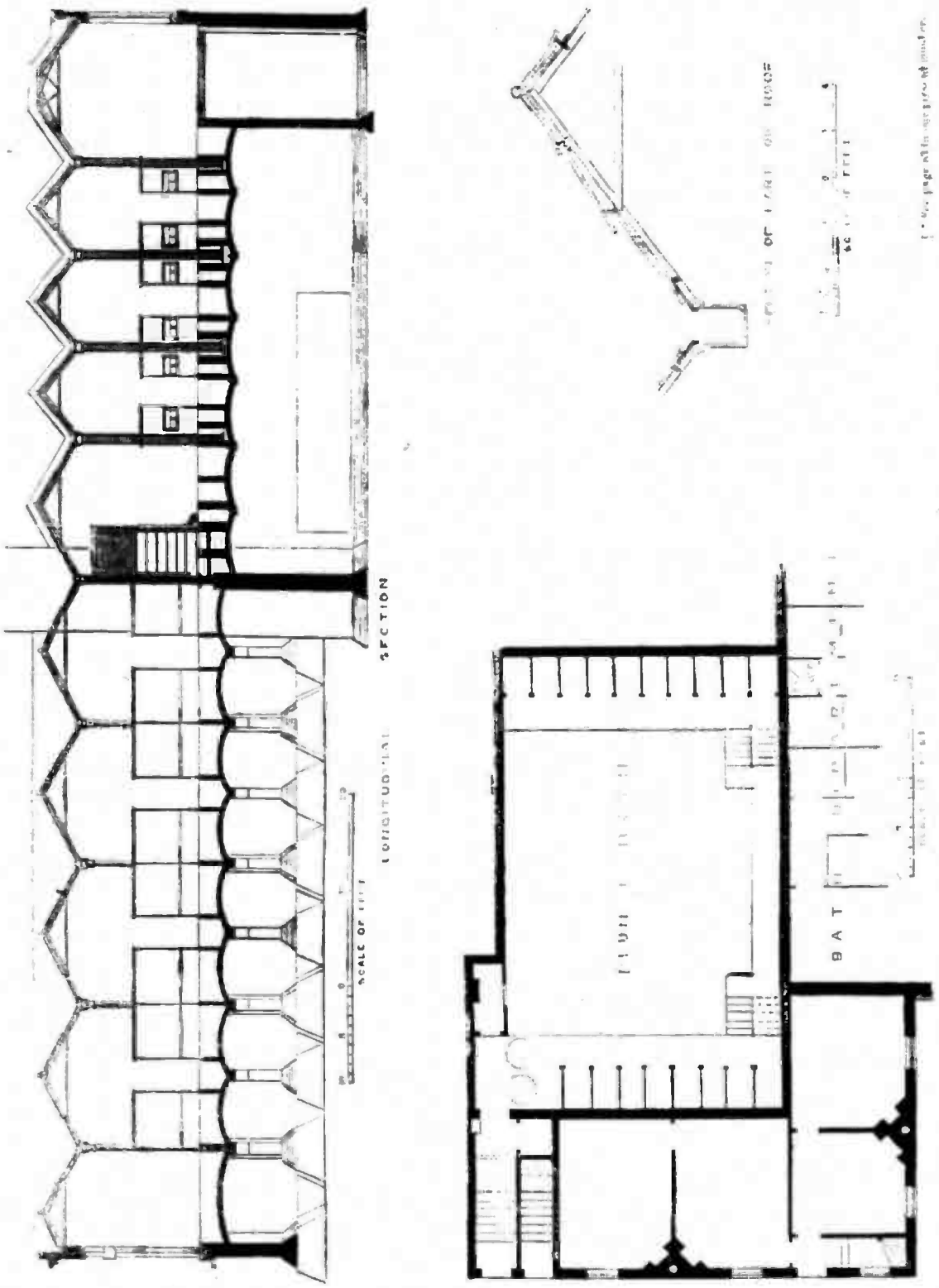
THE MODEL BATHS AND WASHHOUSES, GOULSTON SQUARE, WHITECHAPEL.*



CAST IRON COLUMNS AND ANGLE SHOPS.

It is no uncommon thing to see a superstructure, at the angle corner of a street, some three or four stories in height, supported on a few slender *cast*-iron pillars, these being the only points of support. The extremely frangible nature of cast-iron, arising from its crystalline character, must render this an exceedingly vicious principle of construction.

It must also be borne in mind that the load, from various requirements, such as unequal piers and openings, &c. is seldom or ever coincident with the axis of the columns: in consequence, the liability to fracture is increased by torsion and side strains. Conceive an accidental blow in this state. Their absolute strength should always equal six times their movement load; but, as a district surveyor, I protest against their use. Hollow cylinders, containing the same quantity of metal in sections (assuming a certain proportion), would bear four times the weigh: (theoretically). It appears to me that, although timber story-posts are objectionable in case of fire, a combination of wood and iron—iron standards encasing timber story-posts—would be desirable, particularly in an angle queen, or where any considerable weight has to be carried. The tendency of the building practice seems to be growing "fine by degrees and beautifully less," and is assuming a dangerous lightness with a treacherous material: in points where solidity of construction is most essential.

It is not long since all the leading engineers were using flat girder bridges (of cast iron of considerable dimensions, until the frightful accident at the Dee bridge stopped the practice.

R. L. S.

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